

Please amend claims 1-2, 9-10, 23, and 40 as shown below.

*Sub D1*  
C<sup>1</sup> 1. (Once Amended) A cell of interest producing a donor substrate CMP-SA (cytidine monophosphate-sialic acid) above endogenous levels.

2. (Once Amended) A cell of interest producing an acceptor substrate, the donor substrate CMP-SA, and expressing the enzyme sialyltransferase; wherein said acceptor substrate is a glycan.

9. (Once Amended) The cell of claim 5, wherein said mammalian glycoprotein is selected from the group consisting of plasminogen; transferrin; Na<sup>+</sup>, K<sup>+</sup>-ATPase; and, thyrotropin.

C<sup>2</sup> 10. (Once Amended) The cell of claim 5, wherein said cell expresses at least one enzyme selected from the group consisting of:

- a) GlcNAc-2 epimerase (N-acetylglucosamine epimerase-2);
- b) an enzyme catalyzing conversion of UDP-GlcNAc (uridine diphosphate-N-acetylglucosamine) to ManNAc (N-acetylmannosamine);
- c) sialic acid synthetase;
- d) aldolase;
- e) CMP-SA synthetase; and,
- f) CMP-SA transporter,

wherein said expression is above endogenous levels.

23. (Once Amended) The cell of claim 10 wherein said cell further expresses at least one enzyme selected from the group consisting of:

- C<sup>3</sup>
- a) GalT (Galactose Transferase);
  - b) GlcNAc TI (N-AcetylGlucosamine Transferase I);
  - c) GlcNAc TII (N-AcetylGlucosamine Transferase II); and,
  - d) sialyltransferase,

wherein said expression is above endogenous levels.

*C<sup>A</sup>*  
40. (Once Amended) The method of claim 26, further comprising  
suppressing activity of endogenous N-acetylglucosaminidase.

New claims 48-55 as shown below.

- C<sup>S</sup>*  
*Sub D<sup>2</sup>*
48. (New) The cell of claim 1, which is an insect cell.
49. (New) The insect cell of claim 48, wherein said cell is of a species selected from the group consisting of:  
(a) *Spodoptera frugiperda*;  
(b) *Trichoplusia ni*;  
(c) *Estigmena acrea*; and,  
(d) *Drosophila*.
50. (New) The cell of claim 1, which is a yeast cell.
51. (New) The cell of claim 1, which is a plant cell.
52. (New) The cell of claim 1, which is a bacterial cell.
53. (New) The cell of claim 1, which is a fungal cell.
54. (New) The cell of claim 1, wherein the donor substrate CMP-SA is CMP-Neu5Ac (cytidine monophosphate-*N*-acetylneurameric acid).
55. (New) The cell of claim 1, wherein the donor substrate CMP-SA is CMP-KDN (cytidine monophosphate-2-keto-3-deoxy-D-glycero-D-galacto-nononic acid).